San Luis Obispo County Health Agency

Spring 2007

Public Health Bulletin

A Publication of the Public Health Department, Jeff Hamm, Health Agency Director
Gregory Thomas, M.D., M.P.H., Health Officer • www.slopublichealth.org
2191 Johnson Avenue • P.O. Box 1489 • San Luis Obispo, CA 93406 • (805) 781-5500 • (805) 781-5543 fax

Guidelines for Proper Diagnosis of Pertussis

Pertussis is a highly contagious respiratory infection that can be mild to severe in adults, but fatal to young infants.

The diagnostic gold standard for pertussis is a positive culture result. PCR testing of nasopharyngeal swabs may be available in some commercial labs and can greatly aid in the diagnosis of pertussis.

Serologic testing or DFA should not be relied upon for laboratory confirmation but may aid in clinical decision-making.

All suspected cases of pertussis should have a nasopharyngeal aspirate or swab (non-cotton, mini-tip) obtained for culture from the posterior nasopharynx. It is highly preferable to obtain the specimen before starting antibiotic treatment. The San Luis Obispo County Public Health Lab and California Department of Health Microbial Diseases laboratory will perform parallel testing for PCR locally.

After obtaining the swab, if direct inoculation of selective medium is not possible, clinical specimens can be placed into Regan Lowe transport medium. Push the swab deeply into the transport

continued on page 2 ☞☞☞

Gregory Thomas, M.D., M.P.H.

Specimen Collection Vital Following Drug-Facilitated Sexual Assaults

In recent years, the idea of "slipping someone a Mickey" has taken a new twist with the use of drugs that are more difficult to detect, cause amnesia, and more rapidly impair the victim.

Victims in these cases tend to describe similar experiences. They often acknowledge having one or more alcoholic drinks with a friend, after which the victim describes losing track of events, waking in an unfamiliar environment, perhaps inappropriately clothed, or with the sensation of having had sexual intercourse. They may be confused and sleepy for hours to days following the event.

A low index of suspicion is important by providers – if we don't look for it, or don't perform the right tests, we certainly won't find it!

When there is the possibility that a person may have been the victim of a drug-facilitated sexual assault, the critical collection of urine and blood in a timely manner is very important. Many of the drugs used in sexual assault are metabolized quickly and therefore are unavailable as a forensic tool to support drug-facilitated sexual assault case prosecutions.

It has been suggested that a "96-hour" rule be used to collect urine in these cases (LeBeau et al, 1999); that is, a urine specimen should be collected within 96 hours of the alleged drugging. It is important to emphasize that this is post-ingestion, not after the victim wakes up (M. LeBeau & A. Mozayani, 2001).

In regards to the collection of blood specimens, a 24-hour rule should be used, that is 24 hours

continued on page 3 ☞☞☞

Highlights in this Issue:

Pertussis (cont.)

tube. Send at **room temperature** directly to the county Public Health Department Laboratory to be cultured **within one hour** from the time the specimen was collected. Please note time of specimen collection on the requisition slip. Regular Public Health Laboratory hours are 8 a.m.–5 p.m. Monday through Friday.

If immediate transport is not possible, the Public Health Department will collect the samples directly from patients when ordered by a medical provider. Medical providers should call the department at 781-5500 during regular hours and ask to schedule an appointment for pertussis specimen collection.

Guidelines for nasopharyngeal swab for culture are available on our Web site at www.slocounty.ca.gov.

Prevention though vaccination is the mainstay of pertussis control. The Advisory Committee on Immunization Practices (ACIP) recommends that adolescents and adults (11-64 years) be vaccinated with a single Tetanus, Diphtheria, Pertussis containing vaccine (Adacel, Boostrix) including anyone who anticipates having close contact with an infant less than 12 months of age (e.g., parents, grandparents, child care providers and health care workers.)

Tdap and Dtap, are available at the Public Health Department for $25. Call for an appointment.

For more information, call the Public Health Department at 781-5500 or Public Health Laboratory at 781-5507.

Gastroenteritis Outbreaks and Testing

Outbreaks of gastroenteritis are not uncommon in long-term care facilities, restaurants, hospitals, schools, day care settings, and cruise ships. Large outbreaks tend to occur during the winter and early spring.

Symptoms of gastroenteritis observed in outbreaks caused by either viral or bacterial agents, are very similar and may include diarrhea, vomiting, cramps, and headache. Viruses (specifically norovirus), cause most of these outbreaks and are almost always transmitted from person to person by direct fecal-oral and airborne transmission.

While norovirus infection is generally mild in healthy adults, illness can be severe in the elderly, particularly in those with underlying medical problems. From July 2002 to June 2004, there were 480 outbreaks of viral gastroenteritis in California. In San Luis Obispo County in 2006, eight gastrointestinal outbreaks were reported to the state, three of which were confirmed norovirus outbreaks.

Viral gastroenteritis cannot be diagnosed by traditional stool cultures (for bacteria) or examination of stool for ova and parasites. The county Public Health Department Laboratory is now able to identify norovirus gastrointestinal outbreaks by Real-Time Polymerase Chain Reaction (RT-PCR). Optimal specimens for norovirus testing are stool specimens. Other specimens, such as food, water, or environmental specimens are not routinely tested for norovirus.

The following guidelines must be observed when collecting, storing, and transporting specimens:

Timing of collection: Specimen collection for viral testing should begin as soon as the outbreak is reported. Ideally, the stool specimens should be collected during the acute phase of the illness (within 48-72 hours after onset), while the stools are still liquid or semi-solid. This is when viral excretion is greatest. With RT-PCR, norovirus may be detected in stools collected up to seven to ten days after onset.

Number and volume: Ideally specimens from at least seven to ten ill persons should be obtained during the acute phase of their illness. Stool specimens (10-50 ml) should be placed in tightly capped stool or urine sample cups, and each placed in an individual specimen bag.

Storage and transport: Stool specimens should be kept refrigerated at 4 degrees C. Freezing can destroy virus particles.

Specimen submittal forms are available by calling the Public Health Laboratory at 781-5507 or visiting www.slocounty.ca.gov.

Although norovirus infection is not a reportable disease, all suspected disease outbreaks (including gastrointestinal outbreaks) must be reported to the Public Health Department immediately so appropriate investigation, specimen collection, and intervention can limit the extent of the outbreak and protect the health of others. To report outbreaks or get more information, call Communicable Disease Control at 781-5500.

Drug Facilitated Sexual Assault (cont.)

from when the drugs were suspected of being ingested (Le Beau et al, 1999). Obviously the sooner urine and/or blood specimens are collected, the higher the concentration in the specimen. Unfortunately, most victims do not remember what has happened and do not always report to police first, but many times to emergency departments or a family physician. Therefore it is imperative to collect the appropriate specimens, which because of the time-sensitive matter, more often than not will be a urine specimen. It is important to follow the chain of evidence when collecting the specimens for forensic toxicology.

Specimens collected in San Luis Obispo County are sent to and processed through a forensic lab, Central Valley Toxicology, Inc., for a quantitative result. There is a specific concentration to each drug that meets the requirement to be introduced into court as evidence. This is why the importance of collection of specimens as soon as possible is so important to being able to use the toxicology evidence.

The following drugs are tested for here in this county as drug-facilitated sexual assault ingested compounds: Rohypnol (flunitrazepam) (aka: Ruffies, Roofies, La Rochas, Forget Pill, Trip and Fall, etc.), GHB (gamma-hydroxybutyrate) (aka: Grievous Bodily Harm (GBH), Liquid X, Easy Lay, G-juice, Bedtime Scoop, etc.), Ketamine (aka: K, Special K, Vitamin K, Blackhole, Bump, Kit Kat, etc.) and Blood Alcohol.

More information on drug-facilitated sexual assault compounds can be obtained at the following Web sites: www.911RAPE.org, www.usdoj.gov/dea/index.htm, www.nida.nih.gov/ (click on Club Drugs), and www.drug-free.org/Portal/ (click on Drug Guide).

New HIV Reporting Requirements for Medical Providers and Labs

On April 17, 2006, HIV reporting requirements changed in California. Health and Safety Code Section 121022 now requires that health care providers and laboratories report cases of HIV infection by name to the local health officer. The health officer, in turn, reports this information to the California Department of Health Services (CDHS).

Effective surveillance and disease reporting requires the coordination and participation of the provider community. Confidential names-based reporting is the CDC's standard for ensuring accurate and complete reporting of HIV within the states and territories. California's shift to names-based reporting helps us comply with federal reporting requirements and allows the state and San Luis Obispo County to obtain its share of federal HIV/AIDS funding. Since funding will soon be based on incidence of reported HIV cases, without diligent compliance to the new law, the County and California stand to lose essential funds used to prevent the spread of HIV and care for those who have it.

An informational letter for providers from the CDHS dated September 14, 2006 and new reporting forms have been developed and are available on the CDHS Web site (www.dhs.ca.gov/AIDS).

In addition, the CDHS Office of AIDS cautions health care providers about reporting case information if they previously informed patients that their names would not be reported. By request, the Public Health Department can provide you with a sample testing consent form updated to include proper language about the state's new reporting requirements. The State Office of AIDS recommends that clients previously informed about old reporting requirements be re-consented using new consent forms before ordering any diagnostic or therapeutic monitoring testing to ensure they are aware of the new reporting requirements.

Confidentiality is strictly maintained and is the San Luis Obispo County Health Department's highest priority. All Public Health staff working with HIV/AIDS data receive special training in confidentiality procedures. Since AIDS reporting began in 1986, there has never been a confidentiality breach within the state or county surveillance systems.

For additional information or guidance, please call the County HIV/AIDS Surveillance Coordinator, Michelle Shoresman at 788-2906.

The Real Rx: Slow Food, Lively Places, Real Vitality

Richard J. Jackson, MD, MPH, Megha Doshi and Monica Rai

Although Bob is a new patient, you feel like you've seen him a hundred times. His chief complaint: "Doc, I just feel lousy, I've gained weight, I'm always tired, I hardly exercise and life isn't much fun." You learn that his relationships are struggling: he feels disconnected from his wife and kids, his sex life is absent, and his bosses are demanding and ungrateful. His BMI is over 30, his cholesterol and blood glucose are elevated, and he fits the criteria for depression. You start by recommending modest lifestyle changes but end up prescribing four different medications. Worst of all, you doubt this would benefit him as much as managing his diet, losing weight, exercising more, spending more time with family, working less, and getting enough sleep. As a doctor, you may feel helpless. Your patient is living in an environment and culture that makes all your healthful advice futile and expensive medications with numerous side effects the norm.

Today's health care pages boast plenty of good news. Compared to a generation ago, we have better treatment for hypertension, heart attacks and depression and better surgical techniques. We can prevent many illnesses, and biotechnological breakthroughs detect diseases long before they strike.

Meanwhile, today's doctors are overwhelmed with staggering rates of obesity and associated chronic diseases, skyrocketing health care costs in a confounding system and patients who are more depressed than ever. Almost two-thirds of Americans are now overweight or obese, up from 24% in 1960, and rates of heart disease, stroke, high blood pressure, arthritis and diabetes have increased at similar rates.

Medicine has tried to respond with "fixes" like bariatric surgery for the morbidly obese and prescription drugs for the depressed and diabetic. In fact, 97% of health care dollars is spent on downstream treatments, while only 3 percent is spent on prevention. Prescribing and operating our way through depression, diabetes, heart disease, and obesity is no golden ticket to better health.

In public health, the patient is the population. When the patient has a systemic disease, one aggravated by his or her environment, we need to find and treat the root cause, not just the rash or the fever. Pills and surgery may protect health in the short term, but quality health care depends on environments in which the healthy choice is the easy choice.

Good health requires more than regular check-ups, immunizations and preventive screenings. Prevention is bigger than individual health behaviors and begins earlier than an office visit. Prevention starts in our communities, is embedded in our social values, and should be essential to how we build our environments. The average patient spends only about four hours a year with you. The remaining 8,756 hours are spent out in his or her environment trying to apply what you teach.

Sadly, most Americans live and work in environments in which healthy eating, exercising and enjoying leisure time - important tools for preventing most health conditions - are not easy or convenient choices. The built environment is the foundation of our lives and cannot be neglected as we develop new solutions to illnesses and health conditions.

Let's go back to our new patient Bob. If he's like most Americans, his days consist of working and driving an increasing number of hours, eating fast and prepackaged convenience foods, and coping with too much stress. He probably drives about 440 hours each year - equivalent to 11 workweeks. Soaring home prices leave him no choice but to live miles from work, schools and shopping. As a result, Bob drives over 10,000 miles a year, 250 percent more than his parents drove in the 1960s.

Bob's environment makes driving so routine and necessary that it's easy to overlook the inherent health risks associated with it. Adults with long commutes and busy lives are tired, frustrated and distracted drivers. Over half of Americans admit to driving while drowsy, and studies indicate that falling asleep at the wheel may cause one in five crashes. Traffic has reached such annoying and epidemic levels that even mild-mannered Bob becomes an aggressive, lane-swerving tailgater in the car.

Then there are the less obvious driving-related health hazards. Too much driving can trigger high blood pres-

sure, abnormal heart rhythms, sleep disorders, depression, and neck, shoulder, and back pain. It makes us more vulnerable to colds and flu and less productive at work. It makes us spend more time in the hospital and take more sick days.

Our environments force us to spend more than half our lives sitting in a car or sitting at work, leaving less time and energy for physical activity. Eighty percent of trips of less than a mile are made by car. When we can get out of our cars, there are few safe places to walk and often nowhere within reasonable distance to walk to. Our poorest patients live in "food deserts" that lack places to buy fresh fruits and vegetables but are saturated with fast-food restaurants and corner liquor stores. We tell our patients to exercise and eat well, but if their environments make it impossible to walk or play outside and to buy affordable healthy foods, our prescription goes unfilled.

Car-crazy communities also erode family life and mental health. A May 2001 *U.S. News and World Report* article described the struggles of balancing family and social life with work and long commutes. Community engagement and socialization also suffer when people drive more. In his book *Bowling Alone*, Harvard professor Robert Putnam found that every 10 additional minutes spent driving to work corresponds to a 10 percent drop in community involvement.

America's health is in bad shape. Our patients are more diabetic, more overweight and obese, more depressed and more prone to heart disease and back pain. More than 1 million children and teens take antidepressants. Over 50% of Californians are overweight, and 1.7 million Americans qualify for bariatric surgery. One of three children born today will suffer from diabetes, a disease that degrades their quality of life and can cost them their eyes, feet, kidneys and eventually their lives.

Unfortunately, our lifestyles and environments don't support the healthy choices we need to make. Few Californians live in walkable, bikeable communities. American adults are overworked and take far fewer vacation days than their European counterparts. We spend twice as much on health care but have lower life expectancies and quality of life. Expensive medical treatments may create the illusion of a healthier population, but we spend more to treat and manage preventable diseases than we do to prevent them in the first place.

For example, obesity, overweight, and inactivity among California adults will cost $28 billion just in 2005. Paying for the 1.7 million Californians who qualify for bariatric surgery would cost $52 billion, five times the state budget deficit.

Our deteriorating health and deteriorating environments are not isolated conditions. Health is inextricably linked to our broader environment and institutions - schools, workplaces, hospitals, neighborhoods and local governments.

That's where doctors can enter the equation. We have the power to impact health, both in and out of the office. With our patients, we can measure BMI at every visit. Write a prescription for exercise. Emphasize the importance of reducing work and commute hours and spending more time with family. Sex and exercise are better than Zoloft and caffeine for depression. And, most important, we can ourselves be role models for these healthy behaviors.

Take your knowledge and influence into the community. Some of your patients are influential community leaders: mayors, city managers, school board members, teachers and PTA members. They can contribute to healthy, well-planned communities with parks, sports fields, farmers' markets and good public transportation.

We Americans love our independence, but we also crave more choice. We need healthier choices to be healthier people. And yes, we physicians will continue to treat the patient. But healing our population begins with healing the environment.

Dr. Richard Jackson is a pediatrician and public health officer who has held many positions in the California Department of Health Services including state health officer. He was also center director for Environmental Health at the CDC in Atlanta for 10 years. Ms. Doshi was an executive fellow and Ms. Rai was a graduate assistant when this article was written.

This article in its entirety, along with other articles of interest can be accessed on line at the *Journal of the San Francisco Medical Society* No. 1 January/February 2006.

Prevent an Outbreak of Chickenpox in Your Health Care Setting

You only need one health care provider in your setting to be susceptible to chickenpox to start an outbreak. It is now recommended by the CDC, that everyone receive two doses of Varicella Vaccine or have evidence of immunity. Evaluate your pre-employment PE policy to see that it is updated with this standard. Most people born in the US before 1980 have had the disease, but health care workers need this verified by MD documentation or blood titers. Go to www.slocounty.ca.gov/health/publichealth/commdisease/VPD.htm and print a copy of the Varicella Case and Outbreak Quicksheet.

Free ALA Helpline for Lung Disease Questions

The American Lung Association of California has a free helpline for people to get their lung disease questions answered. The helpline is staffed by medical professionals who can answer questions about medications, treatment, symptoms and more. They can be reached Monday through Friday from 7 a.m. to 7 p.m. at (800) 548-8252.

New Immunization Web Site Launched

A new Web site for the CDHS immunization branch was launched at www.getimmunizedca.org. The site is divided into four channels based on the audience: Me and My Family, Health Care Professionals, School and Child Care Providers, and Policymakers and the Media.

Price Increase for Medical Marijuana ID Card

Effective April 1, the State Department of Health Services increased its portion of the Medical Marijuana Identification Card (MMIC) application fee from $13 to $66 for non-Medi-Cal beneficiaries. Our County portion has been $65 for non-Medi-Cal beneficiaries; so now the total fee will increase to $131. Medi-Cal beneficiaries are only required to pay half of the fee; so their fee will be $65.50, with the State receiving $33 of that fee.

The MMIC program continued with its original fees of $78/$39 through March. On April 1, the program was suspended until new fees go into effect, which is expected to be May 3, assuming the issue is heard by the Board of Supervisors on both March 13 and April 3.

Sign Up for Immunization Program Notification

Every quarter, the county Public Health Department immunization staff meets for trainings, conferences, and immunization updates. If you would like to attend these quarterly meetings and be on the Immunization Collaborative Team e-mail address list, call Liz Sandoval at 788-2357 or e-mail her at esandoval@co.slo.ca.us. In addition to receiving quarterly invitations to attend the meetings, you will receive updates for critical issues on vaccine shortages, recalls and changes.

2007 Immunization Schedule for Children

To download a copy of the ACIP immunization schedule for children and adolescents, go to: www.cdc.gov/nip/recs/child-schedule.htm. Significant changes include:

- The schedule is now two pages: 0 to 6 years and 7 to 18 years.
- Rotavirus vaccine is recommended in a three-dose schedule: 2, 4 and 6 months.
- Influenza vaccine in now recommended for all children 6 to 59 months.
- Human Papillomavirus Vaccine (HPV) is recommended in a three-dose schedule for females 9 to 26 years of age.

Celebrate National Infant Immunization Week

Celebrate National Infant Immunization Week on April 21-28 and Toddler Immunization Month in May. The theme this year is "Up To Date? Celebrate!" This national campaign emphasizes the need to fully immunize children age two and younger against 14 vaccine preventable diseases. If your physician office or preschool or business would like to participate or "create an activity," the County Immunization Program has the supplies, color pages, and more to help you out. Call Liz Sandoval at 788-2357.

Some materials are available for download at:

- www.getimmunizedca.org (go to Policymakers & Media)
- www.dhs.ca.gov/ps/dcdc/izgroup/shared/education/niiw.htm

Mobile Crisis Unit Now Has Responders in North and South

The Mental Health Services Act (MHSA), enacted into law January 1, 2005, is dedicated to transforming the public mental health system and seeks to reduce the long-term adverse impact from untreated serious mental illness.

MHSA funds are available for three types of programming:

Full Service Partnership Funds provide for "whatever it takes" intensive services to a small focal population of persons with severe mental illness. (MHSA requires that at least 51% of the funds be used for FSP programming.)

General System Development Funds improve programs, services and supports for individuals in full service partnerships as well as the entire population of persons with severe and persistent mental illness.

Outreach and Engagement Funds provide for special activities needed to reach unserved populations.

In spring 2006, MHSA funds were used to implement the ten new, improved or expanded initiatives and will continue over the next two years. They were selected based on the integration of MHSA required outcomes and approved strategies, funding criteria and our community's input and priorities. Their implementation will serve as a catalyst for significant shifts in service culture and system changes.

One important expansion of services was to the Mobile Crisis Unit. Previously there was only one responder available for the entire county. This created a delay in services if the responder was already out on a call when another request was received.

Crisis response is now regionalized to the north and south counties to increase efficiency and effectiveness and to collaborate better with law enforcement and other agency providers that may be on the scene. Two responders will now be available 24/7 to intervene when mental health crisis situations occur in the field and after clinic hours.

Regionalization will not only reduce response time but will allow a team approach to dealing with the mentally ill as law enforcement is traditionally the first responder in these situations. Emphasizing a coordinated response will result in better communication between all parties involved. Better communication equals better care, and less frustration for families and others already working with the family.

Doubling the number of responders will allow for more in-depth, in-home/in-the-field intervention and crisis stabilization with individuals, families and support persons. This will enhance the resiliency of those in crisis. Interventions will keep individual safety in the forefront and prevent movement to higher levels of care. Interventions will be client-oriented and asset-centered to maximize the ability of the individual to manage the crisis.

Additionally, this immediate stabilization response will be supplemented with a next day follow-up visit or phone call to continue support and provide assistance in following through with referrals and appointments. These follow-ups will also include discussions with other collaborators, including law enforcement, probation, foster care providers, and Department of Social Services.

For more information regarding services provided by the Mobile Crisis Unit, contact the director, Sandy Friedlander at 547-5311 (pager) or Mental Health Services at (800) 838-1381.

Live CDC Immunization Update: Across the Life Span

Saturday, June 23, 9:45 a.m - 3 p.m. • Shore Cliff Lodge, 2555 Price Street, Pismo Beach

Speaker: Donna Weaver, nurse educator for the National Immunization Program
Target: MDs, NPs, PAs. This will be a fast-paced overview of the latest vaccines and other important issues related to immunization. Includes lunch and CMEs.

To register complete the following:
Name:_____ Title:_____ Specialty:_____
Phone:_____ Address:_____

Make a $10 check out to: SLO County Public Health Department. Mail to SLO PHD – Immunization Program, 2191 Johnson Ave, SLO, CA 93401. Questions? Call Debbie Trinidade, IZ Coordinator at 788-2043.

San Luis Obispo County Reported Cases of Selected Communicable Diseases - 2007

Disease	January	February	March	Total 2007	Total 2006
AIDS	0	0	0	0	10
Amebiasis	**0**	**0**	**0**	0	1
Brucellosis	0	0	0	0	0
Campylobacteriosis	**4**	**5**	**3**	**12**	**54**
Chlamydial Infections	55	52	71	178	567
Coccidioidomycosis	**17**	**13**	**30**	**60**	**147**
Cryptosporidiosis	1	1	3	5	23
E. Coli 0157:H7	**0**	**0**	**1**	**1**	**2**
Giardiasis	1	0	1	2	21
Gonorrhea	**4**	**6**	**9**	**19**	**42**
Hepatitis A	0	0	0	0	12
Hepatitis B	**5**	**4**	**2**	**11**	**69**
Hepatitis C Acute	0	1	1	2	6
Hepatitis C Chronic	**37**	**22**	**37**	**96**	**452**
Hepatitis, Unspecified	0	0	0	0	0
Listerosis	**0**	**0**	**0**	**0**	**2**
Measles (Rubeola)	0	0	0	0	0
Meningitis - Bacterial	**0**	**0**	**1**	**1**	**28**
Meningitis - Viral	4	1	1	6	21
Meningitis - Unknown	**1**	**0**	**0**	**1**	**0**
Meningococcal Disease	0	0	0	0	3
Pertussis	**0**	**0**	**1**	**1**	**75**
Rubella	0	0	0	0	0
Salmonellosis	**5**	**1**	**2**	**8**	**42**
Shigellosis	0	0	0	0	20
Syphilis - Total	**5**	**2**	**0**	**7**	**9**
Tuberculosis	0	0	1	1	2
West Nile Fever	**0**	**0**	**0**	**0**	**1**
W. Nile Virus Neuroinvasive Disease	1	0	0	1	1

San Luis Obispo County
Public Health Department
P.O. Box 1489
San Luis Obispo, CA 93406